

Application No. 10/014,995  
SD-6489

## AMENDMENTS TO THE SPECIFICATION

- Please amend the paragraph starting at page 7, line 18, as follows:

In Fig. 5, leakage gas stream 46 can pass through the open (unsealed) porous end 14 of tube 10 and exit the surface 16 of tube 10 without having to pass through microporous separation membrane 20. Alternatively, leakage gas stream 46 can flow into the plenum region 38 located in-between the outside of tube 10 and the inside of union coupling 32, then flow into the outer surface 16, around the seal ring 36 through the connected porosity of tube 10, and exiting back out through surface 16 on the far side of seal ring 36, also creating a leakage path. In both cases, the lack of a gas impermeable end seal allows leakage gas 46 to bypass flowing through microporous separation membrane 20, which degrades the overall efficiency of the separation process. Fig. 5 illustrates an example where the size of pores 22 in porous ceramic tube 10 varies in the radial direction across the thickness of the wall of tube 10, i.e., from smaller diameter pores 22 near the inner diameter of tube 10 to larger diameter pores 22 near the outer diameter of tube 10.